GEIJI'S CHRISTMAS ODE.

[From "Soul Matters and Maxims of Life."]

TRANSLATED FROM THE SWEDISH.

To the Editor of the Tribune:

SIR: Geiji is a Unitarian, or something more. I do not know that any apology is necessary for the following translation. Is Geiji a dangerous writer? I think Channing, Theodore Parker and Emerson have said even worse things, not to mention Goethe, Hegel, Bruno-Bauer, Feuerbach and Madame George Sand; and these writers are read—some say studied—in this country. Yours, &c. O. O.

New-York, Nov. 16.

WHAT shall I call Thee, Christ?

What shall I call Thee, Thou whose feet have kissed
Of all the world the desolate, desert sands?
Shall I not call Thee my most human brother,
Son of my Father God, of Earth my Mother?
For see! the nails have pierced my feet and hands.

I know Thee for my brother, O my Christ,
O my Belovéd! And this heart of mine
In its best moments, (for we have our moods,)
Enlarges till it lets the whole world in,
When nought of Bad I find, but all of Good;
And then I do not know the name of Sin,
But think God's purpose little understood;
For He is with us in our solitudes:—
Then do we pluck the grapes that are divine,
That lips of prophets have so often missed.

Our lives flow onward till they reach the Sea;
We stand upon the shore, and the abysmal
Thunders reëcho with a voice not dismal—
The Lightnings harm us not. We stretch to Thee
Long, loving arms across the misty distance;
The weak and timid pray Thee for assistance.
Thou givest back for answer: "Not to Me—
Not to your brother make your invocations—
Not to your fellow offer vain oblations.
What fear ye from the Father? I descend
The deeps of Being, and ne'er find an end."

Thou, O Divine One! dost renew the Human
In each child's life that into Life is born;
O Mary's Son!—Son, Thou, of every woman,
Thou pluckest still the Sabbath ears of corn.
Reproving bigotry. And ears forlorn
Hear Thy Evangel, and the low raise high
Their foreheads, claiming Thee, the poor man's Christ,

And Thou art with the wretched when they die,
And Thy discourses, wedge-like, cleave the mist
Of sour convention, when the living dare
Add to their own what is their neighbor's share.

Thy fame is given to the Churches. Thou
Couldst not foresee the holy forgeries,
The saintly shams, the consecrated lies,
That men would sanction with thy name, and vow
Themselves Thy Ministers. I dare not think
Of Thee, but through their brain; I dare not drink
The living waters which my hands have drawn.
And they would brush the glory from the dawn;

Thy name is stamped into the persecutions
With which bad men have hurried men to death;
I dare not to the Sun make my ablutions
Without Thee—dare not draw my human breath.
Even my virtue must not be my own—
Even my virtue is a name for sin.
O Christ, Thou art too strong. Let me alone;
Let go my manhood. I would enter in
To manhood's palaces. The whole world lies
Before me like a Canaan; I would cross
The Jordan, but they beat me back again,
Because I will not take God's name in vain—
Because I would refute their sophistries,
And wage my gain against their mighty loss.

Cæsar before Thee bows—and he should bow;
The Soul before Thee stoops, and it should not
If Man must be contented with his lot,
His lot is Heaven, and his equal, Thou;
When he aspires to reach the high and holy,
But breathes the aspiration from a lowly
Spirit, rebuked and humbled for the small
And powerless part he plays before the All.

[But I am really afraid to continue the translation, since the original grows worse and worse. For the present, at least, let not our language know more of Geiji's "Christmas Ode." Here we have him in another mood. You must take him, on this occasion, however, without much rhythm, leaving the rhymes to fall into their places, when they will do so readily; otherwise avoiding them altogether. Fidelity of rendering is all the merit I claim. Tr.]

What didst thou, friend, anticipate from life?
Has it thy expectations answered fully?
Standing again at my birth-hour before the world
I would say, I will not voyage across thee.

Man lives for money, prates the while of virtue;
He will not love thee in a ragged coat:
Even Jesus Christ's ordain'd and rev'rend servant
Will glance at th' hole i' thy elbow, and thy torn shoe.

A poet took me by the hand, and held me
In a constrained and very warm embrace:
"O poet-brother, worldly men repell'd me,"
He said: "but I am glad to see thy face.

"Truly, most truly, I am glad to meet thee;
I love thy verses—Lend me but one shilling;
My need is great. Upon my word I love thee.
How rare is goodness! ...... What, thou ar not willing!"

Oh, once before, I lent you many shillings,
Oh, twice before, I lent you many shekels:
You loved my verses when you borrowed of me,
Afterward said, I was the worst of poets.

A parson met me in the Field of God,*
"Ah, they lie buried here, my Master's chosen.
The sheep that he will gather, and the sod
Covers the goats, until *that day* reposing
In sleep as perfect, on as soft a pillow.
How great the difference betwixt sheep and lamb!"

His pastoral eyes he, steadfast, raised to Heaven,
"How sinful All, before the Great I AM!"
He left me weeping at my mother's grave-stone,
(Mother devoted, had you never seen me!)
And went unto a wife, whose husband tarried
At toil—hard toil. And she resigned her husband.

I went—I am no better than my neighbors;
I know no crime I would not have committed—
And sinned. But what my sin, shall not be stated.
O God, be gentle with us—do not judge us!

Tell me, my friend, what hast thou from existence?
Say, has it realized thy expectations?
Standing upon the shore, before the ocean,
I would say, Waves, ye shall not bear me over.

* A Cemetery or Grave-Yard is so called in the North of Europe.

Subscriptions to the Weekly Tribune.

TUESDAY, Nov. 26.

Painesville, Ohio.......... 4	McCornellsville, Ohio 30
Waterford, Ohio.......... 24	Gilead, Ind 2

Single Subscriptions from various Post-Offices:

TUESDAY, Nov. 26.	
Michigan 1	England.................... 1
Massachusetts 2	Iowa....................... 1
New-York................... 8	Rhode Island............... 1
Pennsylvania 1	New-Jersey 2
Kentucky................... 2	California................. 1
Maine...................... 1	Vermont 1
Tennessee.................. 1	Connecticut 1
Italy 1	Ohio 1
	Ireland 1

Subscriptions received to The Daily Tribune.

TUESDAY, Nov. 26.

Salem, N. J............... 1	Skaneateles, N. Y.......... 1
Mabbettsville, N. Y........ 1	Pine Meadow, Conn......... 1
Lyons, N. Y............... 1	Newark, Del............... 1
North Woodstock, Conn..... 1	Stockbridge, Mass......... 1
Tuckahoe, N. Y............ 1	Mount Savage, Md.......... 1

Subscriptions Received to the Semi-Weekly Tribune.

TUESDAY, Nov. 26.

Baldwinsville, N. Y........ 1	Centreville, Ind........... 1
Wheatland, N. Y........... 1	Pittsburgh, Pa............ 1

☞ The *Oswego Journal* says vessels from the upper Lakes are crowding into that harbor, and canal-boats are eagerly urging their way toward the Hudson. The streets of the city are filled with ice.

SCIENCE.

Late Scientific Intelligence....No. XV.

[Prepared for The Tribune.]

We gather from late and authentic sources a few items of scientific importance and general interest:

PHOTOGRAPHY.

M. LEGRAY has addressed a communication to the French Academy, urging his claim as the first to apply the fluoride of silver to Photography on paper. M. Legray states that he has been engaged in researches of this kind for the last year-and-a-half, and has for some time past ascertained by experiments crowned with the most complete results, that fluoride of silver must be considered as the most sensitive agent which can be employed in Photography, whether on glass or on paper.

The Paris "Society for the Encouragement of Arts and Manufactures" has prepared a Schedule of Prizes for further discoveries in Photography. The prizes amount to 8,000 francs. The first series will be awarded for impressions on paper or other non-metallic substances; the second, for impressions on metal. The grand desideratum is a prize of 5,000 francs for obtaining photographic impressions of objects in their natural colors. The papers and models of competitors are to be in the hands of the Secretary of the Society in Paris, on the 31st of December next.

PHOTOMETRY.

M. ARAGO has recently communicated to the Paris Academy of Sciences a further account of his researches on Photometry—again alluding to the possibility of taking the direct measurement of the hight of a cloud, by means of a polarimeter, a series of tables of which are in course of preparation. He also gave an account of some observations he had commenced, with a view of comparing and numerically ascertaining the difference in intensity which exists between the light coming from those parts of the moon called seas, and that of the borders and more brilliant parts, as also between the light called ashy, and that of the visible disc of the moon: and spoke of some peculiarities presented from the observation of the light of the satellites of Jupiter, compared with that of the planet, and of the difficulties which exist in giving an explanation of the phenomena.

MANUFACTURE OF SUGAR IN THE FRENCH COLONIES.

The French Minister of Agriculture and Commerce in the early part of the present year dispatched M. GUIET to the French Colonies, to observe and experiment upon the celebrated processes proposed by M. Melsens for the manufacture of Sugar. The first Report of M. Guiet is dated at Guadaloupe, 26th April, and from a comprehensive synopsis in the London *Patent Journal*, we take the following interesting extracts:

Up to the period indicated, M. Guiet had made but few experiments, and those not under favorable circumstances; the results, however, were such as to lead to the expectation that the bisulphate of lime will be advantageously employed in the Colonies in the manufacture of sugar. According to the first observations, the cane-juice preserved from fermentation by means of the bisulphate of lime, can be made to undergo, without inconvenience, a decantation and filtration before being cleansed or defecated. The bisulphate of lime will also arrest the fermentation of the canes, which are oftentimes left after having been cut, exposed to the heat of the sun, when any interruption takes place in the pressing process. M. Guiet appears to think that the ingenious process of M. Boucherie for the preservation of wood may be applied to the injection of any part of the sugar cane with the bisulphate of lime, thus preserving it from fermentation. He has commenced a series of experiments on this interesting subject.

THE GEOLOGICAL FORMATION OF ORES OF ZINC.

BY M. J. DELANONE.

The following is a *resumé* of M. Delanone's observations and experiments:

1. All the Zinc Ores are deposits of thermal sources.

2. The different proportions of water entering into the composition of the ores of these beds, represent the different degrees of heat of their sources.

3. The Sulphurets of Lead, Zinc, &c. are generally the first formed. They most probably result from the reaction of organic matters in the Sulphates.

4. The Carbonates of Lead, Zinc, &c. are generally deposited above the Sulphurets and formed by the reaction of the metalliferous sources in some Carbonate.

5. Hence, a real Zinc Ore bed cannot be found without Carbonate, and a calcareous rock always serves as the guide in all researches for these ores.

6. As the Carbonates do not readily precipitate the Salts of Iron and Manganese except in contact with the air, the Hydrated Ores of Iron and Manganese form superficial deposits above the Ores of Zinc.

Lastly, and as the practical consequence which results from the preceding, the beds of Hydrated Oxide of Iron containing Calamine, in Belgium and the North of France, indicate the presence of the more valuable Ores of Zinc and of Lead, the existence of which can thus be readily ascertained.

THE COLORS EMPLOYED BY THE ANCIENTS.

Analysis and Directions for the Manufacture of a Mineral Blue Color, found in a Gallo-Roman Villa, in the forest of Bretonne (Seine Inférieure), in Normandy. By M. GIRARDIN, Corresponding Member of the Academy of Sciences, and Professor of Chemistry at the College, Rouen.

Several kilogrammes of this blue color were found in an earthen jar, in the state of friable concretions; but which, on close examination, had evidently been a fine powder. It had no taste, was insoluble in water, but effervesced violently on contact with acids; 100 parts of this blue gave out 15·50 of carbonate of lime, with traces of oxide of iron, when treated with hydro-chloric acid.—After this treatment, the insoluble powder remaining had all the appearance of artificial ultra-marine; it resisted the most powerful heat, and was neither fused nor altered in color. The most powerful acids had no action whatever on it; it was scarcely acted upon by nitro-muriatic acid; but when heated to redness, with several times its weight of caustic potash, it fused, and on cooling, presented a mass of a sombre green color, for the most part soluble in hydro-chloric acid. I could find no trace whatever of cobalt. A quantitative analysis gave me the following results:

Silica	49·1
Alumina	6·4
Lime, with traces of Magnesia and Iron	19·4
Soda	15·5
Oxide of Copper	9·3
Total	100·0

This blue substance is, therefore, a glass, colored by oxide of copper, in all respects analogous to the *cæruleum* of Vitruvius, or the Alexandrian glaze (*fritte*,) or puzzola, which the Roman artists employed for fresco painting, and the decoration of their apartments.

Chaptal, in 1809, made a qualitative analysis of a color of the same kind, which was found in the shop of a color-dealer in Pompeii, and presented to him by the Empress Maria-Louisa; and Descotils has subsequently recognized the same copper color in the hieroglyphical paintings in an ancient Egyptian monument.

Sir H. Davy speaks of the same mineral color, in his interesting work on the colors of the ancients, published in 1815. He states that the blue parts of the monument of Caius Cestuis, of the nuptials of Aldobrandine, and of the baths of Titus, at Rome, are done with this color. In an excavation made at Pompeii, in 1814, in the presence of Sir H. Davy, he found a pot of pale blue color, which he analyzed, and found to be a mixture of lime and Alexandrian glaze. Davy did not give any quantitative analysis of this blue color, but quoted the following passage from Vitruvius: "The preparation of this blue color was originally invented at Alexandria, and Nestorius has since established a manufactory of it at Puzzola. It is an admirable discovery; sand and flowers of natron (carbonate of soda,) are first ground together, as finest flour, then mixed with copper filings, moistened with a small quantity of water, and made into a kind of paste. It is then heated in an earthen pot, placed in a furnace, so that the mass becomes fused, and gives rise to a blue color." It was with this glaze that the Roman artists obtained all their shades of blue, by mixing the finely powdered glaze with various proportions of chalk.

This same color was also found at Rome, in 1742, in the shop of a color-dealer, adjoining the baths of Titus, and at Vieux, in the Department of Calvados.

The beauty and solidity of this color, which resists the action of the most powerful agents, and is not affected by air, light or moisture, ought to claim the attention of our painters and decorators, especially as it is also cheaper than smalt, azure, or cobalt. It may be obtained by strongly calcining for two hours, at a forge heat, a mixture of 60 parts of silicious sand, 45 parts of soda, and 9 to 10 parts of oxide of copper.

METHOD OF HARDENING OBJECTS IN PLASTER OF PARIS, AND RENDERING THEM LIKE MARBLE.

The following is from the *London Chemical Gazette*:

Take 2 parts of stearine, 2 parts Venetian soap, 1 part pearl ash and 24 to 30 parts of solution of caustic potash. The stearine and the soap are cut into slices, mixed with the cold lye and boiled for about half an hour, constantly stirring. Whenever the mass rises a little cold lye is added. The pearlash, previously moistened with a little rain-water, is then added, and the whole boiled for a few minutes. The mass is then stirred until cold, when it is mixed with so much cold lye that it becomes perfectly liquid, and runs off the spoon without coagulating and contracting. Before using this composition, it should be kept for several days well covered. It may be preserved for years. Before applying it to the objects, they should be well dusted, the stains scraped away, and then coated by means of a thick brush with the wash, as long as the Plaster of Paris absorbs it, and left to dry. The coating is then dusted with leather or a soft brush. If the surface has not become shining the operation must be repeated.

PEAT—IMPORTANT DISCOVERIES.

Our readers may recollect the extraordinary announcement made a few months ago, regarding the alleged discovery of new properties in the article of Peat—a substance hitherto considered only fit for fuel. The incredulity which was manifested at the discovery of its other valuable qualities, was not dispelled by any subsequent success in producing the new materials; and the momentary excitement died away as rapidly as it had begun. It now appears, however, that there is really something in it.

A late number of the *London Patent Journal* gives at great length the specifications of new patent for improvements in treating Peat, and other carbonaceous and ligneous matters, so as to obtain products therefrom. The Patent is taken out by William Benson Stones, of Golden-square, County of Middlesex, Manchester warehouseman. It is dated March 7, 1850, and was enrolled Sept. 6, 1850. The description of the patentee's improvements covers 21 specifications.

The first part of the improvement relates to the pressing of Peat, by means of roller-presses suitably arranged for the purpose. The peat thus pressed and dried is next to be distilled in iron retorts—the patentee preferring those made of sheet-iron, and, if practicable, one placed within the other, so that the products obtained from the distillation may pass between the inner and outer retort, and escape through an exit-pipe in the outer. This exit-pipe dips into a strong iron box or condenser below the surface of the water contained therein; a pipe from this condenser communicates with others: these are fitted with taps to draw off the liquid products of distillation; and the gases pass off into the hydraulic main. If the gas does not possess sufficient illuminating powers, a portion of coal-tar, or, preferably, some of the fatty matter of the previous distillation of peat is placed in the retort with the peat.

Forty per cent. of *charcoal* may be obtained by removing the peat-charcoal from the retort after the distillation is completed; carbonic acid being applied to extinguish the combustion. This charcoal may be pressed into the form of bricks, for use in locomotives, marine engines, &c.; or, if required very pure, it undergoes the same process as animal charcoal.

The patentee's next improvement relates to the manufacture of a fuel containing a larger proportion of carbonaceous matters than ordinary coal, and free from sulphur and slag, and therefore peculiarly adapted for locomotives and marine engines.—His next improvement consists in the application of peat and other substances to the manufacture of fire-lighters, using for this purpose the lighter and more spungy pieces.

The next claim is for the use of peat-charcoal in place of wood-charcoal, in the manufacture of spirit of sulphur or bisulphuret of carbon, in order to furnish the portion of carbon required; and for the manufacture of gunpowder.

The next improvement relates to the use of *peat-gas* for the purposes of light and heat. As peat-gas does not possess great illuminating powers, the patentee proposes to combine it with 30 to 40 per cent. of atmospheric air, and to burn it by means of peculiarly constructed burners, having a platinum wick, and with the tubes of the burners made larger than in the ordinary gas-lamp, and placed obliquely; the platinum attains a white heat, and great illuminating power is thus obtained. But as this process for increasing the illuminating power of peat-gas may be objected to, the patentee proposes to carburet the peat-gas. In addition to gas and ammonia, he also obtains from the distillation of peat a peculiar acid, and a bi-tumino-adipose compound, which he calls "paranaphthadipose," as containing principally the elements of a hydro-carbon which produces a light napththa, &c. One of the products of this is a good solvent of gutta percha, caoutchouc, etc. A great variety of other products are obtained by chemical treatment. There are a number of minor specifications, for which we have no room.

A London correspondent of the *New-York Commercial Advertiser* alludes to this subject in the following terms:

THE IRISH CALIFORNIA OF 1849.

About a year and a half ago Lord Ashley and O'Gorman Mahon startled the House of Commons by an announcement that a method had been discovered by which Irish peat could be made to yield a variety of products of the most valuable kind, which would realize in the market a profit of upward of 100 per cent. Much excitement was created by it at the time, and it was boasted that Ireland had at length found a means of wealth that would raise her forthwith to the hight of prosperity. A few explanations, however, showed that Lord Ashley, in speaking on an Irish subject, had fallen into the common infection of Irish precipitancy, and that although the products he mentioned could undoubtedly be obtained, there was no satisfactory evidence as to the real cost of the process and its consequent profit. He had, it is true, produced a candle made from the peat, and had lighted it on the table of the House, but without some illumination in the way of actual figures, this step could have only the effect of a pretty trick.

Since that time, however, the party by whom the patent was taken up (Mr. Owen a private gentleman of property and of unquestionable integrity,) has caused the experiments to be carried on upon a definite scale, and results have at length been arrived at, it is said, of the most satisfactory kind, by which not only the candles and other products can be exhibited, but their cost, as it would appear, can be definitely estimated. The following statement of the annual expenditure and produce of the trial works for one year has just been placed in my hands:

EXPENDITURE.

56,500 tuns of peat, at 2s. ₱ tun	£5,650
455 tuns of sulphuric acid, at £7	3,185
Wear and tear of apparatus, &c	700
Wages, labor, &c	2,000
Cost of sending to market and other incidental charges	2,182
Profit	11,908
Total	£25,625

PRODUCE.

365 tuns of sulphate of ammonia at £12 ₱ tun	£4,345
255 tuns of acetate of lime, at £14	3,575
19,000 gallons of napththa, at 5s	4,750
109,500 pounds of paraffine, at 1s	5,475
73,000 gallons volatile oil, at 1s	3,656
36,000 gallons fixed oil, at 1s	1,800
Total	£23,62

These results have not yet been made public in any way in London, but if they should be fully borne out they will create a great sensation, since nearly one-seventh of the whole surface of Ireland consists of bog. The commercial value of the various articles has been stated considerably below the existing market quotations, and the charcoal which would also be obtained in the process has been entirely omitted from the estimate, as well as the subsequent value of the land that would be reclaimed by the removal of the peat.—The statement shows, nevertheless, a profit of more than 100 per cent. The paraffine is a fatty, inodorous matter, and it is from this that the candles are made. I have one of them burning before me at this moment, and its appearance and flame are the same as wax. The light, however, seems rather less white than that from spermaceti. The largest candle manufactures in London have fixed the price they are willing to give for the paraffine at 1s. per pound.

☞ Six cotton mills on Fall River have partially or entirely stopped operations. The proprietors announced a reduction of wages, and the operatives refused to work.

☞ Worket *vs.* the Auburn and Rochester Railroad Co. has been awarded $7,000 damages, for having had one of his feet cut off by one of the Company's locomotives.

MURDER.—Mr. Brittan McClendall, of Edgefield District, S. C., was murdered on the 18th inst. by his step-son, Philip Hubburt.

☞ Hon. Edward Carrington Cabell of Florida was married at St. Louis on the 5th to Anna Maria Wilcox, daughter of Mrs. General Ashley.

SCIENCE AND REVELATION;

A LECTURE.

BY PROF. O. M. MITCHEL, OF CINCINNATI.

[Reported for The Tribune.]

The Fifth Lecture of Prof. M.'s Brooklyn course was delivered on Monday evening. Previous to entering upon the consideration of the topic assigned for the evening, the Lecturer, in reply to questions which had been put to him, explained his former remarks in regard to the nearest apparent position to which the Moon had been brought by the Telescope. He had stated that, with a magnifying power of 1,000, the Moon appeared as 240 miles distant, and had been understood as expressing the opinion, that this was as near as it was practicable to bring that planet. On this point he cited the assertion of a German Astronomer, (whose name we did not catch,) that the best magnifying power ever used for actual observations was not above 300, and that in order to see inhabitants on the Moon's surface a power of 50,000 would be requisite. The magnifying power of the Telescope, he explained as lying entirely in the eye-piece, which could be made of any form or of any desired power, but the difficulty was, that all the imperfections of the object-glass, and all the impurities of the atmosphere, are magnified by it so that with a high power it is impossible to see anything. With a power of 1,000 the Lecturer had occasionally been able to see for a few moments; with one of 800, sometimes for half an hour; but in an ordinary state of the atmosphere, 500 times was as much as objects could be magnified with distinctness. From this cause the difficulty in the way of closer observation of the Moon arises. The speaker then directed his attention to those questions which had been announced as the subject of discussion for that evening. He held in his hand a book, the most wonderful ever produced in this world—a book of the greatest pretensions and of most extraordinary character. This book, itself, teaches us that the God who built the universe and figured the Earth was its author; that He dictated it to his servants and that by many hands, during a period of a thousand of years, His thoughts and communications were written. This book professes to give an account of the origin of our Earth and the order of its creation, and though the imparting information on the subject of natural science is not its main object, it is an incidental one. The writers who penned this volume, wrote three thousand years ago before the light of science had dawned upon the world. They did not refuse to draw their illustrations from objects about them, with which they and their first readers were familiar. Have they refrained from giving their own notions instead of the revelations of the Divine mind? Let us, said the speaker, approach the subject with all due reverence. There is one chapter, said he, which is filled with the most astonishing inquiries put by the LORD himself, from the whirlwind to Job to show his inability to comprehend the Divine power and wisdom. The Professor then read the thirty-eighth chapter of Job and remarked that it was important to bear in mind in considering it that it was written three thousand years ago, when the mind of man was dark on all the subjects which science, then unborn, has since enlightened. It was also important to remember that it was an extremely difficult matter to ask abstruse questions upon any scientific subject with which the questioner himself was unacquainted; if any one, ignorant of mathematics, mechanics or astronomy should attempt to ask a difficult question of an expert in either of those sciences, he would be quite as likely to put a perfectly simple or easy inquiry, all questions being alike difficult to him. Now if these interrogatories are found to be of the most profound nature, those which the mind of man has never been able to reply to, and all of them grouped together, the fact is a most extraordinary fact, and one which would indicate an intelligence in the author far above that of any human being. The first inquiry respects the construction of the earth. "Where was thou when I laid the foundation of the earth? declare, if thou hast understanding. Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it? *Whereupon are the foundations thereof fastened?* or who laid the corner stone thereof?" Has any man been able to answer these queries? What retains the earth in her position? The limit to which we have arrived toward the explanation is the discovery of a certain law called gravitation. And what is gravitation? We can only define it as the continued and uniform exercise of the Divine will. The second interrogatory is respecting the limits of the sea and the operations of the clouds. The power of the sea has been witnessed by those who have rode its waves in storms or seen the lashings of tempests upon the rocky coasts. We see it heaved to and fro in tides, but feel secure that its operations are confined within certain limits. What is it that holds it, then? Were its specific gravity changed it might sweep over the highest mountain tops. If the Atlantic could be transferred to Saturn it would not occupy the same relation to that planet it does to ours; its comparitive weight would be changed and its operation of a totally different character. What is the nature of this fundamental principle which thus keeps the sea within its bounds? "Hast thou commanded the morning since thy days, and caused the day-spring to know his place?" In this 3d question the Almighty asks Job to explain the reason of the earths stable, uniform and most unaccountable rotation. This for two thousand years has not varied the one-hundredth part of a second, as is proved by the revolutions of the moon which are measured by the earth's rotation as a unit.—The lecturer here briefly alluded to the results which would follow from any disturbance of this uniform motion. But this stability is promised to be perpetual, and is the stated recurrence of day and night, is even made the symbol of stability. The passage "It is turned as clay to the seal; and they stand as a garment," Professor M. explained as referring to the atmosphere, which by absorbing and refracting the light, produced the twilight. "Where is the way where the light dwelleth? and as for darkness, where is the place thereof that thou shouldst take it to the bound thereof, and that thou shouldst know the paths to the house thereof? Knowest thou it because thou was there born? or because the number of thy days is great?" The nature or the source of Light is as inexplicable now as at the period of these interrogatories. If we adopt the naturalist theory we are at once surrounded by difficulties. What is the material which in such infinite profusion and with such almost infinite speed is darted through space? And what is the power by which it is propelled with such enormous rapidity through vast distances, without inflicting pain upon the eye by its contact? If we adopt the undulatory theory, the subject is equally incomprehensible. What is the fluid which must pervade all space, and in what manner are its undulations transmitted almost instantaneously and in right lines? Why does not this fluid obstruct the motions of the heavenly bodies? But if the nature of Light is undetermined, its sources are no less so. Let us take one of the rays which strike our eye softly and faintly as we gaze upon the milky way, and trace it to its home. We pass the limits of the earth's orbit, we go on among and beyond our own solar system, till it is lost in the distance behind us, and at the end of ten years' travel we stop and look around us. We have passed through space at the rate of 12,000,000 of miles a minute, the speed of Light itself. Have we arrived at our destination? We have not reached even those stars which seemed largest to us from the earth. The Pleiades and Orion are still beyond us, retarding their original forms, and the little ray we are tracing is no brighter than at our start. Again we go on, and in 10,000 years we stand upon the very confines of the system of Stars of which our Sun forms one. All the Stars, still we see this light beyond us. If we still pass on twenty thousand miles twice told, its home is still so far beyond us that we know nothing of its character. Even imagination refuses to assist our investigations. Millions of years would not suffice to reach the limit of telescopic observation. "Can'st thou bind the sweet influences of Pleiades, or loose the bonds of Orion? Can'st thou bring forth Mazzaroth in his season? or canst thou guide Arcturus with his sins?"—"The sweet influences of Pleiades" were explained by a reference to the ancient practice of marking the coming of the seasons by the heliacal rising of particular stars just in advance of the Sun. Thus in Egypt, Sirius was the precursor of the overflow of the Nile. The Pleiades marked the vernal equinox, and this fact also serves to fix the date of these writings. By calculating the advance of the Equinox, we find that these questions were propounded at least 3,000 years since. Orion was a Winter constellation which preceded the Sun while the earth was bound with frost.—Mazzaroth means Zodiac with all its signs. Arcturus, the speaker supposed to refer to the polar star, and this verse he considered as applying to the third or axial motion of the earth, which produced the precission of the Equinoxes. The lecturer read an extract from Jeremiah, in which reference is made to the "host of Heaven which cannot be numbered," and said that the stars visible to the naked eye had been numbered—then, that a few nights sufficed to count them all, for no eye could see more than four thousand. But the milky way gives indications that there are more there too small to be distinctly visible, and the telescope brings to view immense numbers. The speaker had attempted to count those seen through the telescope in a space not larger than a thousandth part of the Moon's size, and gave it up in despair. There were millions in that limit.—There was one other passage read, in which it is distinctly stated that the earth is in empty space—"He hangeth the earth upon nothing." This was a contradiction of the received opinions of the day, but modern science has demonstrated it. Whence did the writers who put on paper such evidence of intelligence far beyond that known upon the earth in their time derive their knowledge, but from Divine inspiration!

On Thursday evening another lecture on the same subject will be given.

THE WORKERS OF MODERN TIMES;

A LECTURE.

BY CHALES A. DANA.

[Sketched for The Tribune.]

On Monday evening the Second Lecture of the Course before the Mechanics' Institute was delivered by CHAS A. DANA, Esq. his subject being "The Workers of Modern Times." He began by characterizing Labor as the Geology of the Socia World, for it underlies all our Civilization. But for Industry all that we most prize—Religion, Law Civilized Enjoyments—would be nothing. Mr. D briefly sketched the earliest form of Labor—tha of Slavery, the natural offspring of Savagism; to Serfdom, or the system that fixed the peasant to the soil; and to the present system, in which men are nominally their own masters. The principles which now regulate Labor may be summed up in the word Individualism; their essence is "Every man for himself." This latter system—the Wages System—was the only one to be considered in treating of the History of Modern Labor. The Lecturer then described the transition from Serfdom to the Wages System of Labor, which took place during the Middle Ages. Even in old Rome there were "Guilds," or Trade Associations, in some sort coöperative. Similar institutions sprang up during the middle ages, at least so far as to be "Unions" for mutual assistance and protection. Mr. D. reviewed the policy of the age in regard to trades, the apprenticeship system, the trade corporations, the trials of skill, and the extensive supervision of the Guilds over tradesmen and their conduct. By all these arrangements Labor was secured from the power of Capital, and no mechanic ever fell into pauperism. He referred to the organization of the Guilds as military companies, and their jealous exclusivism. By their contests with the nobles, and through the favor of monarchs who were jealous of the nobility, the Guilds secured charters for cities, releasing them from the usual responsibility to feudal lords, and thus arose the Free Cities—one of the most important epochs in the formation of modern society. Then, for the first time, was Labor recognized as an element of the State. By these Guilds, Feudalism fell; and they established the system of hired labor. They introduced a mechanical industry, which has ever since exercised a far greater influence upon the world than the Agricultural branch. The vast increase of Wealth and many of the great discoveries of Science have resulted from Mechanical labor. Mr. DANA went at some length into a consideration of the Wages System, reviewing what he deemed its best and its worst features. It diffused Intelligence, fostered Arts, increased Wealth, improved Government, produced a more tranquil Social state, and gave a powerful impetus to Progress. But it perpetuated a desire to avoid Labor, it fired the great majority to get the means of making others work for them that they might live without work. The very motive which produced Slavery and Serfdom is thus perpetuated. The same desire is now universal instead of exceptional; the system provides the means and legitimates the operation of making others do our work without rendering an equivalent. The Lecturer passed to a consideration of the means used by the non-workers to produce this state of immunity. Labor is compelled to pay its perpetual tribute to Idleness, not by the old method of Brute Force, but by the potency of Money—the divinity which has assumed the throne of Force. Money is the best served God in the Olympus of the popular mythology. We talk loudly of other and higher deities, and such indeed are worshiped in the private devotions of obscure thinkers who light and feed for Humanity the beacons of the Future. Worshiped, too, are they in the sincere greatness of conspiring workshops and Police-hunted clubs, where stalwart Men, with the dust and stains of Labor for sacred robes, and the deep voices of their fellows for responding chorus, raising the hard hands that Productive Industry has consecrated, utter the eternal liturgy of Liberty, Equality and Fraternity, the advent of Justice and Liberty, Peace and Goodwill among men. Mr. D. referred to the seizure or purchase of the soil by the powerful, and its rental at rates dictated by the necessities of the weak, as one of the causes of present social inequalities. He explained some of the restrictions placed by the Guilds upon the tendency to monopoly, some of which exist in practice at the present day. But the Guilds themselves were not in keeping with the progress of mankind, and they were suppressed. The first consequences were a large accession of laborers in mechanical employments, actively and fertility of invention, enterprise and unbounded competition. Workmen increased rapidly, and in proportion to that increase, wages fell. Employers gave not what was really earned, but as little as they could get work done for. The result of this was extreme poverty among workmen, a state of things which the Lecturer illustrated in a subsequent part of his remarks by a variety of startling facts. Mr. D. looked upon Commerce, as hitherto conducted, as one of the agencies for the spoliation of the laboring classes. As the producer must sell, and the consumer must buy, the merchant capitalist has both, at his mercy, and according to their respective necessities, buys cheap and sells dear. The next instrument of spoliation was Money Lending, Usury, the most unsparing of tyrants, which holding in its hand a vast capital, grasps that which hundreds and thousands have toiled in pain and hopelessness to produce. Money, being the universal medium of business, renders every man inevitably its tributary. Mr. DANA then referred to the condition of Labor in Europe in the 18th Century, the introduction of machinery in England. Coming down to the era of the French Revolution, he showed the opinions of some of the leaders as to Labor and its demand from Government. The Revolution was over, Feudalism abolished, but Labor was still the prey to a war of interests and the tyranny of Wealth. Mr. D. gave a rapid review of the condition of Labor since that period, and then proposed the question whether Laborers are as well off as they ought to be. A great mass of facts were here presented, tending to open the eyes of the most careless to the fearful condition of the Laboring Classes of the Old World. In the course of these facts, he quoted some of the startling revelations made by the *London Morning Chronicle* a year since—a hideous picture of want, oppression and crime most appalling to contemplate. That our Laborers are not in a like condition is owing (said he) to sparseness of population, not to absence of Land Monopoly, Exploitation of Capital, high profits to the Gamblers of Commerce, or the luck of Money Lenders. He saw the same tendency here as in Europe toward the most deplorable results, though he was glad to recognize the vigorous germs of a better system—the system of Association. The right of man to free use of the soil is taught even in the Senate of the United States. The Workingmen on every hand are combining against the tyranny of the Wages system; they are waging a warfare, which promises success, against Land monopoly. He referred to various associations now in successful operation, in Europe and in this country, as the Molders of Cincinnati, the Tailors of Boston, &c. In this system he saw the emancipation of the Laborer. Mr. D. spoke of the reform of commerce commenced by some of the workers, the system of purchasing articles of general necessity by large quantities. Here was much good done for the Laborer. In Money lending no reformatory steps had been taken, but the matter was under discussion, and could not sleep. The escape from all old systems is already begun, not by Utopian ideas, but by a few simple, practical measures which were within the comprehension of every body, and which he commended to the earnest attention of his hearers.

Prof. Hume will deliver the Third Lecture of the Course on Monday evening next. Subject—"Electro-Magnetism and Galvanism."

CITY ITEMS.

BOARD OF SUPERVISORS.—*Tuesday.*—A report in favor of correcting tax of sundry persons named, and denying petitions of others, was adopted.

The accounts of several papers for inserting election notice, were audited by Committee at $2 50 for first insertion, and $1 22 each subsequent. Adopted.

On petition of John H. Burley, hurt at the difficulty in Astor-place, in May, 1848, and confined to his house ten weeks, the Board allowed him $245 additional to $200 already allowed, the bills of his three physicians being $345.

The unsettled bill of the Coroner, charging separate inquests for each person killed at the Hague-st. explosion, was taken from the table and referred.

LAUNCH.—The packet-ship S. M. Fox will be launched to-day at high water, about 2 o'clock P. M. from the ship-yard of W. H. Webb, foot of Sixth-st. East River. The S. M. Fox is about 1,500 tuns burden, and possesses the same advantages in model, strength and durability of materials that has distinguished the ships from the same builder for several years past. This ship will be under the command of Capt. A. C. Ainsworth, and will take her place in Mortimer Livingston's Union Line of Havre Packets, and is expected to sail in the early part of the ensuing month.

FIRE.—Nov. 26, 11 A. M.—The alarm of fire from the Fifth District was caused by the burning of a bed in the basement of the house corner of Pearl and Ferry sts. The damage was very trifling.

CITY CENSUS.—The returns of the Marshals for the First Ward, represent the population at 19,755. This gives an increase of 7,525 over the census of 1835, and of 9,126 over that of 1840.

REAL ESTATE.—The following sales were made in Wall-st. yesterday:

By A. J. Bleecker.

House and lot No. 315 24th-st. near 10th-av. 2x198.9	$4,450
10 lots on 109th-st. between 9th and 10th-avs, $115 each—25x100	1,150
10 lots adjoining, $75 each, same size	750
1 lot on 83d-st. 25x102.2	200
1 lot on 80th-st, near 2d-av. 25x100	275

ELOPEMENT—ARREST OF THE FUGITIVES.—A telegraphic dispatch was yesterday received by the Chief of Police from Providence, setting forth that James Hall, a married man residing at that place, had sloped with Miss Jane Tracy, a romantic young lady of 16 Summers. Hall was minutely described, and Sergeant Finney of the Second Ward Police was dispatched to find him. He proceeded to the Philadelphia boat and there espied the couple, who were at once arrested and sent home.

ARREST OF A BURGLAR.—A man who gave his name as George Richards was arrested yesterday by officer Wallace of the Ninth Ward, charged with breaking into the dwelling of Mr. Perry Mapes, No. 76 Charles-st. and stealing therefrom silver spoons, forks, castors, &c. to the value of $85. The property was found in possession of the accused, who was locked up by Justice Bleakely for trial.

GRAND LARCENY.—Officer Burleigh, of the Lower Police Court, yesterday arrested a colored woman named Elsea Evans, charged with stealing $157 from her employer, Mrs. Lewis, of No. 6 Thompson-st.; $130 of the money was found secreted at the residence of the [illegible] between two beds. Several new articles of [illegible], which had probably been purchased with the balance of the money, were also found. She was committed by Justice Osborne for trial.

DEATHS BY DROWNING.—Coroner Geer held an inquest yesterday at the foot of Murray-st. N. R. upon the body of an unknown man about 30 years of age, found drowned. He had on when found a pair of gray pants, black frock coat, plaid vest, white muslin and woolen shirts, cotton drawers and boots, about 5 feet 10 inches in hight, black hair, face pox marked. Verdict, death by drowning.

Also, at the foot of Duane-st. upon the body of an unknown man found drowned, about 5 feet 10 inches in hight, bald on the head. Had on when found, a brown over-coat, black dress coat, black vest, mixed pants, colored silk cravat, white dickey and boots. Verdict, death by drowning.

SUDDEN DEATH.—The Coroner held an inquest yesterday at the Bethel Church, near pier No. 11, N. R. upon the body of Steen Norberg, a native of Sweden, 57 years of age, who suddenly fell, on Sunday night, at the corner of Rector-st. and Trinity-place, and immediately expired. Deceased was Captain of the Swedish bark Oden, and arrived from Sweden about ten days since. He has left a wife and five children. A verdict of death by the bursting of a blood-vessel of the chest was rendered.

BROOKLYN ITEMS.

☞ Col. E. L. SNOW will address the citizens of South-Brooklyn, upon the subject of Temperance, this evening, at the Bethel near the South Ferry.

EARLY CLOSING.—An adjourned meeting of the Dry Goods Merchants took place Monday evening, Elijah Lewis, Sen. presiding. The Chairman introduced the business of the evening in an appropriate manner, and expressed himself as committed heartily to the cause of the Clerks, the success of which is now beyond all doubt. The Committee appointed to canvass the city, made their report, from which it appears that the great bulk of the Dry Goods Merchants of our city have given in their adhesion to the arrangement of closing at 7 o'clock during the following Winter, commencing next Monday evening. A Standing Committee has been appointed to carry out the objects of the meeting, consisting of Messrs. J. P. Williams, L. S. DeLano and A. M. Wood. Ten thousand circulars are to be printed and distributed throughout the city in a systematic manner, under the direction of the Dry Goods Clerks' Association, to whom the merchants have entrusted this part of their proceedings. Advertisements will be published for one week, announcing the arrangement. Cards will be exhibited in the various Dry Goods Stores adopting the early closing scheme, and at other prominent places. This early closing movement is a "fixed fact." The following is the resolution:

Resolved, That in order to commence a permanent arrangement of the Early Closing movement, this meeting pledges itself to adopt the following plan of operations, viz: that on Monday, the 2d day of December next, the Retail Dry Goods Stores, of Brooklyn be closed at 7 o'clock, (and continue to be closed at the same hour every evening, (Saturday evenings and evenings previous to Holidays excepted,) until the 1st of April, 1851; and at 8 o'clock until the 1st day of Nov. 1851.

WILLIAMSBURGH ITEMS.

UNION OF THE CITIES.—The Mechanics and Workingmen's Society have a debate on the subject this evening, as to whether the measure will be beneficial, or otherwise, to the citizens of Williamsburgh. The Society meetings are in the basement of the Universalist Church. The speakers are, affirmative, John H. Tobit, combination type printer; negative, Henry A. Rutan, mason, both of the Third District.

SHOP LIFTING.—Three boys from New York, on Saturday evening, stole a shawl and 2 pieces of flannel, from the store of Mr. Hamilton, Grand-st. One of them was arrested and the goods recovered.

ACCIDENT.—A lad named Mahoney fell from a wagon loaded with plank, and the wheel passed over one of his arms, fracturing the bone.